Dr. L. Cavalli-Sforza 18, Via Fatebenesorelle Milan, Italy

Dear Luca:

My reply to your tape (which was quite clear) must have crossed your letter of April 24. To reassure you, let me be even more explicit, even if repititious.

- 1. We can undertake Howard's support (assuming that Norm will confirm his approval of Howard's extended leave; he was not so pleased about that a few months ago). I propose to reappoint him under our Genetics training grant, effective June 30, 1963, so as to use some balances in our current year. He should sign the enclosed forms and make his own arrangements about terminating his other support. The checks will come monthly, essentially in advance, direct from Stanford.
- I would be very pleased to cooperate in your grant proposal. See enclosure, to which you should furnish address.

I have been almost out of commission this last month, between writing computer programs and lacking my good secretary. But we have also been converting everything in sight to machine systems and this begins to show some signs of diminishing the total chaos.

The PDP computer has arrived, and with its display scope is a charming plaything. We are setting up keyboard connection to it (at the Comp Center) from the Department. We have also been successful in winning a "LINC" computer for our own local use, part of an NiH evaluation. This is a small machine, only 1000 word memory, but with excellent analog input/output features. It may be especially useful as a terminal station for connection to the PDP = 7090 IBM complex.

As ever,

Joshua Lederberg Professor of Genetics P.\$.

Luca - I am worried that stratification with respect to ABO has been grossly underestimated, and may lead to gross bias in tests for selection. Introgression between groups is likely to be sex-dependent; "hybrid" matings in any case will be atypical in many respects other than inherent fertility, which can lead to spurious attributions of incompatibility. Have you any chance to look at the distributions of ABO , ating types for spouse-to-spouse correlation independent of offspring?

Why not also stress this in your NATO proposal, a/c its relevance to the consequences of international migration?

We have recently been studying the seasonal variation of birth incidence in the United States, with reference also to its impact on the incidence of neonatal disease and of mental retardation. Over all, the cyclic swing in the United States is about 10% from the mean expectation, with a peak in September and a trough in May. Many factors influence the details of the spectrum, including maternal age, the father's occupational stratum, color, and the general geographic region. However, these effects are rether small compared to the striking differences between the North American and the European data. With some variation from country to country, European births show a striking peak in the spring and grough in the fall.

Although some statistics are available, the matter has never been studied in any detail. Further comparisons of the seasonal variation of healthy and of diseased births, with respect to the factors available in each country's data, may throw further light on the actual mechanisms of the cycles (about which there can be easier speculation than proof at the present time) and on their impact on child health, especially prematurity, which is dependent on season in the United States.

Of special interest will be the reproductive behavior of immigrant groups (especially in the United States) compared to the patterns in the country of origin.